Cluster-based adaptive metric classification

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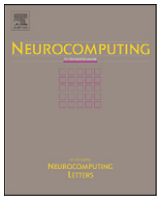

Corrigendum

Corrigendum to "Cluster-based adaptive metric classification" [Neurocomputing 81 (2012) 33–40]

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1. On page 33 lines 2–15 of the third paragraph are modified to the following:

The components analysis family of algorithms learns transformations from constraints as explained in the survey of Yang [34]: "Relevant Components Analysis (RCA) [10] learns a global linear transformation from (a set of) equivalence constraints. The learned transformation can be used directly to compute (a) distance between any two examples. Discriminative Component Analysis (DCA) and Kernel DCA [11] improve RCA by exploring negative constraints and aiming to capture non-linear relationships using contextual information. Essentially, RCA and DCA can be viewed as extensions of Linear Discriminant Analysis (LDA) [12]. Neighborhood Component Analysis (NCA) [4] learns a distance metric by extending the nearest neighbor classifier. The Large Margin Nearest Neighbors (LMNN) classifier [6] (further) extends NCA".

2. On page 34 lines 2–9 of the second paragraph are modified to the following:

As pointed out by Yang [34], "in addition to traditional metric learning that assumes a quadratic form for the distance between any two vectors, (Information Theoretic Metric Learning — ITML) [21] expresses the learning (of the parameters of) a Mahalanobis distance function as a Bregman optimization problem, by minimizing the differential relative entropy (LogDet divergence) between two multivariate Gaussians (that are) subject to linear constraints on the distance function".

[34] L. Yang, An overview of distance metric learning. Technical report, School of Computer Science, Carnegie Mellon University, 2007.

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